AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning at line 16 of page 4, as follows:

In the preferred embodiment, transistors 18 and 20 are insulated gate bipolar transistors (IGBTs). However, the principles of the invention may be extended to the use of other switching devices such as MOSFET's, BJT's and MCT's. Circuit 10 may be used as a simple DC to AC inverter for generating ~~and~~ an alternating current by appropriately switching transistors 18 and 20 between a conducting and nonconducting state with a suitable control circuit. When this alternating current passes through the battery cells 14, 16, heat is generated for warming the battery pack 12. As will be appreciated, circuit 10 is suitable for use as a DC to AC inverter for use with the electric motor of an electric vehicle.

Please amend the paragraph beginning at line 1 of page 5, as follows:

The graph of Figure 2 illustrates three separate waveforms versus time. Waveform 28 represents the constant DC voltage source provided by either of battery cells 14, 16. ~~Wave-form~~ Waveform 30 represents an alternating current source which can be produced by appropriately switching the transistors 18, 20 of circuit 10 at alternate time intervals. Waveform 32 represents the oscillating power profile which results when the AC current I is coupled with the DC battery voltage V. The power profile of waveform 32 includes positive energy (+w) represented by area 34 and negative energy (-w) represented by area 36, and when ignoring losses, the oscillating power profile V * I has a net zero effective energy exchange.

Please amend the paragraph beginning at line 19 of page 6, as follows:

The third ~~inverter~~ inverter branch 68 also includes a first transistor 94 and a second transistor 96 which are similarly connected between the first node 102 and the third node 106. Line or node 76 is disposed between first and second transistors 94, 96. An anti-parallel diode 98 is connected in parallel with transistor 94 and an anti-parallel diode 100 is connected in parallel with transistor 96.

Please amend the paragraph beginning at line 18 of page 7, as follows:

As disclosed, battery pack 112 includes a first battery cell 114 and a second battery cell 116 having a common node 118 formed ~~therebetween~~ there between. Each battery cell 114, 116 within battery pack 112 may include one or more individual energy storage or devices or cells, and may also be chosen from a wide variety of battery technologies.

Please amend the paragraph beginning at line 14 of page 8, as follows:

The third ~~inverter~~ inverter branch 136 also includes a first transistor 170 and a second transistor 172 which are similarly connected between the first node 140 and the second node 142. A third switchable line 178 is connected between first and second transistors ~~172, 174~~ 170 and 172. A first anti-parallel diode 174 is connected in parallel with transistor 170 and a second anti-parallel diode 176 is connected in parallel with transistor 172.

Please amend the paragraph beginning at line 13 of page 10, as follows:

If the condition of $f>>f_o$ is not met, current regulation can become more complex, but higher I_{1RMS}/I_{ORMS} and I_{2RMS}/I_{ORMS} ratios can be achieved. The advantage of this is that the same RMS battery currents, I_{1RMS} and I_{2RMS}, can be achieved with lower losses in Q1, Q2, D1, D2 and [[L_0]] the total inductance, L_0, seen by current i_0 – i.e., $L_0 = L_a + L_b + L_x + L_3$. Typical $-i_0$, i_1 and i_2 waveforms are also shown in Figures 6 and 7.